Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Federal State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
	)	
Forward-Looking Mechanism for High Cost Support for Non-Rural LECs	)	CC Docket No. 97-160 DA 98-848

REPLY COMMENTS OF U S WEST COMMUNICATIONS, INC.

In these reply comments,[1] U S WEST Communications, Inc. ("U S WEST") will refute AT&T Corp.'s ("AT&T") allegations that its inputs have received intense scrutiny.[2] In fact, AT&T has not fully supported its model or its inputs in the smaller, high-cost states served by U S WEST. These are the very states in which the accuracy of a high-cost model and its inputs is critical. Second, U S WEST reiterates that the Benchmark Cost Proxy Model ("BCPM") is fully capable of using geocoded data as a model input. The sponsors have not incorporated geocoding to date because the street address-based geocode data is inferior to the road-based methodology presently used in the Benchmark Cost Proxy Model 3.1 ("BCPM 3.1").

---

[1] Public Notice, Common Carrier Bureau Requests Further Comment on Selected Issues Regarding the Forward-Looking Economic Cost Mechanism for Universal Service Support, CC Docket Nos. 96-45 and 97-160, DA 98-848, rel. May 4, 1998 ("Public Notice"). Order extending deadline for filing comments, DA 98-990, rel. May 22, 1998.

[2] Comments of AT&T Corp. and MCI Telecommunications Corporation on Designated Input and Revenue Benchmark Issues, filed herein June 1, 1998 ("AT&T/MCI").

When geocode data that does a good job of identifying high-cost households is available, the BCPM 3.1 is fully capable of incorporating and using the data. U S WEST also refutes AT&T's allegations that the BCPM approach to identifying households, "clearly would produce double recovery of the costs of serving households without telephones."[3] BCPM's methodology does not provide for double recovery of costs of serving households without telephone service and is fully in compliance with the Commission's 6th model criteria.[4]

U S WEST also agrees with other commenters and provides data which demonstrates that the sponsors of the HAI appear to model toward predetermined results. Finally U S WEST reiterates its support of cost-based or affordability benchmarks and urges the Commission to abandon its controversial efforts to define what should go into a revenue benchmark and then subject providers to time consuming and unnecessary efforts to identify those revenues.

I. AT&T'S INPUTS HAVE NOT BEEN SCRUTINIZED IN THE HIGH-COST STATES

AT&T/MCI states that their inputs have received intense scrutiny. Nothing could be further from the truth. In seven U S WEST states[5] where the HAI was introduced, the HAI sponsors produced no witness to support their inputs. In these states only the Hatfield Inputs Portfolio was introduced, which provides no

---

[3] Id. at 9.

[4] In the Matter of Federal-State Joint Board on Universal Service, Report and Order, 12 FCC Rcd. 8776, 8912-16 ¶ 250 (1997) ("Universal Service Order"), on recon., 12 FCC Rcd. 10095 (1997); appeal pending sub nom. Texas Office of Public Utility Counsel v. FCC, No. 97-60421 (5th Cir.).

[5] Idaho, Montana, Nebraska, New Mexico, North Dakota, Utah and Wyoming.

evidential support for their inputs. Therefore, the support for their inputs was not available, nor were expert witnesses familiar with these inputs available for cross examination. In states where previous editions of the HAI inputs were utilized in unbundled network element proceedings, the state commissions have highly modified the HAI inputs in their final orders in these cases.[6] The only conclusion that may be drawn is that HAI sponsors have not adequately supported their inputs and that their inputs cannot withstand close scrutiny.

II. BCPM 3.1 IS CAPABLE OF USING GEOCODED DATA WHEN ACCURATE DATA IS MADE AVAILABLE

BCPM 3.1 is fully capable of substituting geocoded customer data for the census data it currently uses within the model. This would be done in the BCPM 3.1 preprocessor. However, the current state of geocoded data does not provide for accurate placement for rural customers. In fact, over 20 percent of wire centers nationally in the HAI model have not a single actual customer location identified with a geocoded point.

The BCPM 3.1 approach to identify households does not provide for double recovery of providing service to households without telephone service. BCPM 3.1 uses consistent counts of housing units, households, and line demand. The household and housing unit demand is from 1995 census data, while line counts are based on 1996 quantities.

---

[6] See, e.g., Arizona Docket No. U-31875-96-479, Colorado Docket No. 96S0-331T, Idaho Docket No. T-96-15, Iowa Docket No. RPU-96-9, Montana Docket No. D96.11.200.

BCPM 3.1 properly provides loop plant connections to all housing units. Thus, the average cost-per-line in the BCPM 3.1 cost calculation includes the cost of connecting all housing units in its cost-per-active line. BCPM 3.1 calculation of universal service support only provides support to occupied housing units.

Line extension charges are used predominantly to provide service to new housing units, not existing. Housing units yet to be built are not included in BCPM 3.1 calculations. Many of the unoccupied housing units included in BCPM 3.1 calculations have facilities provided to them and it is appropriate that their costs be part of the support determination. There is no double recovery of costs. In our Dec. 19, 1996 comments in this docket, U S WEST addressed the issue of how the universal service fund should handle construction costs.[7] In its decision the Commission acknowledged further investigation into this issue is warranted. The Commission should disregard AT&T's allegations of double recovery and should address the issue of how construction costs should be handled in the proceeding contemplated in its Universal Service Order.[8]

III. THE HAI MODELS TO PREDETERMINED RESULTS

The HAI model uses inputs not to determine the true costs of providing sufficient plant to serve subscribers in high-cost areas, rather the HAI model manipulates inputs to produce predetermined results that in are the self-interest of the modelers' efforts to produce low unbundled network element costs.

---

[7] U S WEST Comments, filed herein Dec. 19, 1996 at 11-14.

[8] Universal Service Order, 12 FCC Rcd. at 8902 ¶ 231.

U S WEST concurs with other commenters including GTE who argue, "[T]he HAI Model input values are result-oriented and fail to reflect real-world conditions. Each new release of the HAI Model has introduced new changes and inputs that reduce costs but are not verified by evidence or documentation."[9] In testimony filed before the Minnesota Public Utilities Commission in Docket No. P-442. 5321, 3167, 466, 421/CI-96-1540 (see Attachment 1 hereto), the Minnesota Commission's Generic Investigation of U S WEST Communications, Inc.'s Cost of Providing Interconnection and Unbundled Network Elements, filed March 2, 1999, Dr. William Fitzsimmons, of Law & Economics Consulting Group, Inc. states: "The default run of Hatfield 2.2.2 (filed in September 1996) estimated that the statewide average unbundled loop cost for Minnesota was $12.55. Now, eight versions, hundreds of changes, and many months later, the default run of Hatfield 5.0a estimates that the statewide average unbundled loop cost is $12.78, a difference of 23 cents."[10] Dr. Fitzsimmons demonstrates that the number of sheath miles between Hatfield 2.2.2 and Hatfield 5.0 more than doubled (11,432 distribution miles to 31,216 distribution miles), yet the loop costs only increased by 23 cents. Dr. Fitzsimmons goes on to point out, "Even changes between recent Hatfield versions produce inexplicable results: distribution miles increased from 26,150 miles under Hatfield 4.0 to 31,216 under Hatfield 5.0a (a 19 percent increase), yet loop costs actually declined from $12.85 to $12.78. These results give the

[9] Comments of GTE, filed herein June 1, 1998 at 22.

[10] Attachment 1 at 4 (footnote omitted).

appearance that the Hatfield model developers are modeling toward predetermined results."[11]

IV. THE COMMISSION SHOULD ADOPT COST-BASED OR AFFORDABILITY-BASED BENCHMARKS

The Commission should heed the recommendations of many of the commenters[12] and reject the use of an administratively burdensome, controversial and unreliable revenue-based benchmark which incorporates the revenues of services other than those obtained from providing universal service. The Commission should adopt a benchmark based on cost or a measure of affordability.

The Commission should adopt benchmarks that are simple and understandable, leave states with the primary role of rate rebalancing and assuring affordable service to all of their customers and should be capable of implementation by January 1, 1999. Today's high-cost fund "benchmark" is based on costs 115% above national average costs. The Commission could adopt a similar methodology for the high-cost fund for non-rural companies beginning January 1, 1999. Ironically, if the Commission would look at the costs determined by the BCPM 3.1 using the Commission's common inputs,[13] the nationwide average cost is $26.08. If the Commission used the same methodology it uses today to determine the funding

---

[11] Id. at 4-5 (emphasis in original).

[12] See, e.g., GTE at 26-29; BellSouth at 9-13; Aliant at 5; NTCA at 2-4; Southwestern Bell Telephone Company, Pacific Bell, and Nevada Bell ("SBC") at 24; Sprint at 4-6; USTA at 4.

[13] U S WEST uses the common inputs for illustrative purposes only. The use of the common inputs is not an endorsement by U S WEST that these inputs are appropriate.

level, 115% of the Nationwide average costs would be $29.99, 120% would be $31.30. These funding levels basically equal the revenue benchmark proposed by the Commission in its Universal Service Order. The calculation was simple and understandable, and did not need reams of data from all providers. The cost model could also help the Commission determine the super benchmark by calculating how many customers would receive support and how much support would be necessary at various high-cost funding levels. The Commission would be able to determine how establishing funding at various levels would best levelize the high-cost problem among the states.

The affordability approach proposed by SBC is also unnecessarily complex and inappropriate for the Commission to use for federal funding.[14] Individual state levels of affordability should be left to the states to determine. The role of the federal fund should be to provide support to very high-cost customers and to levelize the high-cost problem among the states. The federal fund should also provide explicit support for implicit support found in interstate access rates. The Interstate High Cost Affordablility Plan ("IHCAP"), proposed by U S WEST in this proceeding, and a cost-based primary and super benchmark achieve these goals. The IHCAP also keeps the federal mechanism simple, understandable, and capable of implementation by January 1, 1999. IHCAP and the cost-based benchmarks also

[14] SBC at 22-29.

leave states with the primary role for rate-rebalancing and assuring affordable service to all of their customers.

Respectfully submitted,

By: _____

Robert B. McKenna
John L. Traylor
Suite 700
1020 19th Street, N.W.
Washington, DC 20036
(303) 672-2798

Its Attorneys

Of Counsel,
Dan L. Poole

June 12, 1998

ATTACHMENT 1

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Edward Garvey	**Chair**
Joel Jacobs	**Commissioner**
Marshall Johnson	**Commissioner**
Gregory Scott	**Commissioner**
LeRoy Koppendrahyer	**Commissioner**

In the Matter of the Commission's Generic Investigation of U S WEST Communications, Inc.'s Cost of Providing Interconnection and Unbundled Network Elements	**Docket No. P-442, 5321, 3167, 466, 421/CI-96-1540**

DIRECT TESTIMONY

OF WILLIAM L. FITZSIMMONS

MARCH 2, 1998

II. BRIEF HISTORY OF THE HATFIELD MODEL

Q. WOULD YOU PLEASE PROVIDE A BRIEF DESCRIPTION OF THE RECENT HISTORY OF THE HATFIELD MODEL?

A. Since its introduction, the Hatfield model has proven to be highly unreliable. Nine versions of the model were released since September 1996. These revisions were necessary because of significant errors in each version of the model, even though AT&T represented in many regulatory proceedings that each version of the model was accurate and reliable.

In September 1996, AT&T filed Version 2.2.2 of the Hatfield model in arbitration proceedings in all fourteen states in U S WEST's region, including Minnesota. U S WEST uncovered numerous mechanical and conceptual flaws during the arbitration proceedings. For example, the model provided approximately one-half of the sheath miles necessary to reach the customers currently served by U S WEST, indicating that the model builders did not subject their important design parameters to basic reality checks.

Just five months later, in February 1997, Release 3.0 was introduced. This version included a total redesign of the distribution section of the model. In particular, it addressed the issue of insufficient sheath miles to reach a large portion of telephone customers.

Release 3.1 was introduced just three weeks later to correct significant errors. This version, however, was also plagued by errors, such as (1) incorrect road cable

calculations; (2) incorrect application of placement costs; (3) omission of subfeeder routes required to serve certain Census Block Groups (CBGs); and (4) omission of underground and buried trenching costs. AT&T/MCI filed Release 3.1 in Minnesota. Between Release 2.2.2 and Release 3.1, distribution miles more than doubled,[1] but the monthly loop cost fell due to reductions in placement costs (See Figure 1).[2] The lower placement costs calculated by Release 3.1 decreased the estimated cost of placing buried distribution facilities in Minnesota by over $229 million.[3]

Release 3.1 Update was introduced less than two months later, in April 1997, to correct some of the flaws of Release 3.1.

In July 1997, Release 4.0 "preliminary" was introduced. This release of the model was plagued with many interface errors, and was replaced within three weeks.

In August 1997, the updated Release 4.0 was submitted. AT&T originally released this version of the Hatfield model in this proceeding, but soon superseded it with Release 5.0, which incorporates a significantly different clustering design for distribution plant.

On December 11, 1997, AT&T issued Release 5.0 of the model. This version contains

---

[1] Release 2.2.2 was filed with the Amended Direct Testimony of Dan Alger, September 20, 1996, MPUC Dockets Nos. P-442, 421/M96-855; P-5321, 421/M-96-909; and P-3167, 421/M-96-729. Release 3.1 was filed with the Direct Testimony of Stephen Siwek, March 31, 1997, MPUC Dockets Nos. P-442, 5321, 3167, 466, 421/CI-96-1540.

[2] Between Release 2.2.2 and Release 5.0a, the mileage increased even more while the monthly loop cost increased only slightly. See Figure 1 for a comparison of the mileage and monthly loop cost between 2.2.2 and 5.0a.

[3] If feeder costs are included, the cost reduction resulting from new placement costs increases from $229 million (for distribution only) to $235 million (for distribution and feeder). The effect of the placement cost reduction was moderated somewhat in Release 4.0. I discuss the reduction in placement costs between 2.2.2 and 5.0a in Section IV of my testimony.

significant changes from previous versions, including a different clustering design and major changes to transport and switching calculations. Even with all of the modifications included in Release 5.0, however, costs are relatively unchanged. The version of the Hatfield model in this proceeding (Release 5.0a) is a revised version from the original release of Hatfield Release 5.0 that AT&T/MCI filed in this proceeding. This latest version of the Hatfield model is still under investigation and has already been found lacking.

With this history, it is clear that the Hatfield model is not a reliable tool for estimating costs. Each version is seriously flawed, and offsetting changes, such as a large reduction in placement costs that effectively offset a large increase in the number of sheath miles of distribution in Release 3.1 Update, give the appearance that the developers are modeling towards predetermined results.

...

The default run of Hatfield 2.2.2 (filed in September 1996) estimated that the statewide average unbundled loop cost for Minnesota was $12.55. Now, eight versions[4], hundreds of changes, and many months later, the default run of Hatfield 5.0a estimates that the statewide average unbundled loop cost is $12.78, a difference of 23 cents.[5] Figure 1 illustrates that between Hatfield 2.2.2 and Hatfield 5.0a, the sheath miles of distribution more than doubled, yet the loop cost increased by only 23 cents (2 percent). Even changes between recent Hatfield versions produce inexplicable results: distribution miles increased from 26,150 miles under Hatfield 4.0 to 31,216 miles under Hatfield 5.0a (a 19

[4] AT&T and MCI have filed Versions 2.2.2, 3.0, 3.1, 3.1 (4/11), 4.0, Preliminary 5.0, 5.0, 5.0y, and 5.0a in U S WEST's states.

[5] In September 1996, AT&T adopted the default inputs of the Hatfield model and estimated a statewide average unbundled loop cost of $12.55. In the current proceeding, AT&T/MCI change a small number of inputs and estimates a statewide unbundled loop cost of $12.68, only 13 cents different than its earlier estimate.

percent increase), yet loop costs actually declined from $12.85 to $12.78. These results give the appearance that the Hatfield model developers are modeling toward predetermined results.

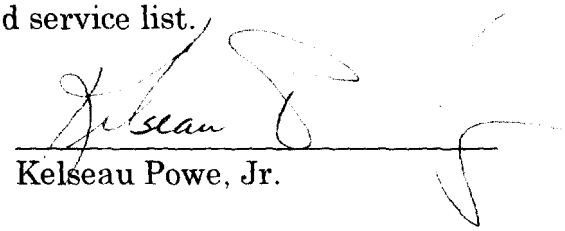
Figure 1

COMPARISON OF MINNESOTA DISTRIBUTION MILES AND UNBUNDLED LOOP COSTS

Models (with Defaults)	Distribution Miles	Percent of 2.2 Miles	Statewide Monthly Loop Cost	Percent of 2.2 Loop Cost	Investment Per Line
Hatfield 2.2.2	11,432	100%	$12.55	100%	$515
Hatfield 3.1 Update	28,033	245%	$12.11	96%	$523
Hatfield 4.0	26,150	229%	$12.85	102%	$533
Hatfield 5.0A	31,216	273%	$12.78	102%	$525

CERTIFICATE OF SERVICE

I, Kelseau Powe, Jr., do hereby certify that on this 12th day of June, 1998, I have caused a copy of the foregoing **REPLY COMMENTS OF U S WEST COMMUNICATIONS, INC.** to be served, via United States Mail, postage prepaid, upon the persons listed on the attached service list.



Kelseau Powe, Jr.

*Served via hand delivery

*William E. Kennard
Federal Communications Commission
Room 814
1919 M Street, N.W.
Washington, DC 20554

*Gloria Tristani
Federal Communications Commission
Room 826
1919 M Street, N.W.
Washington, DC 20554

*Michael K. Powell
Federal Communications Commission
Room 844
1919 M Street, N.W.
Washington, DC 20554

*Harold Furchtgott-Roth
Federal Communications Commission
Room 802
1919 M Street, N.W.
Washington, DC 20554

*Susan P. Ness
Federal Communications Commission
Room 832
1919 M Street, N.W.
Washington, DC 20554

*Kathryn C. Brown
Federal Communications Commission
Room 500
1919 M Street, N.W.
Washington, DC 20554

*Lisa Gelb
Federal Communications Commission
8th Floor
2100 M Street, N.W.
Washington, DC 20554

*Sheryl Todd
Federal Communications Commission
8th Floor
2100 M Street, N.W.
Washington, DC 20554

(3 copies)

*Brad Wimmer
Federal Communications Commission
8th Floor
2100 M Street, N.W.
Washington, DC 20554

*International Transcription
Services, Inc.
1231 20th Street, N.W.
Washington, DC 20036

M. Robert Sutherland
Richard M. Sbaratta
Rebecca M. Lough
BellSouth Telecommunications, Inc.
1155 Peachtree Street, N.E.
Atlanta, GA 30309-3610

Jay C. Keithley
Sprint Local Telephone Companies
Suite 1110
1850 M Street, N.W.
Washington, DC 20036

Mark C. Rosenblum
Judy Sello
Seth S. Gross
AT&T Corp.
Room 3245I1
295 North Maple Avenue
Basking Ridge, NJ 07920

Lawrence E. Sarjeant
Linda Kent
Keith Townsend
United States Telephone Association
Suite 600
1401 H Street, N.W.
Washington, DC 20005

Robert M. Lynch
Durward D. Dupre
Darryl W. Howard
Southwestern Bell Telephone Company,
Pacific Bell and Nevada Bell
Room 3703
One Bell Plaza
Dallas, TX 75202

Sandra K. Williams
Sprint Local Telephone Companies
POB 11315
Kansas City, MO 64112

Joe D. Edge
Tina M. Pidgeon
Drinker, Biddle & Realth, LLP
Suite 900
901 15th Street, N.W.
Washington, DC 20005

PUERTORICO

L. Marie Guillory
Pamela Sowar Fusting
National Telephone
Cooperative Association
2626 Pennsylvania Avenue, N.W.
Washington, DC 20037

Richard A. Askoff
Regina McNeil
National Exchange Carrier
Association, Inc.
100 South Jefferson Road
Whippany, NJ 07981

Gail L. Polivy
GTE Service Corporation
Suite 1200
1850 M Street, N.W.
Washington, DC 20036

John F. Raposa
GTE Service Corporation
HQE03527
600 Hidden Ridge
Irving, TX 75038

Jeffrey S. Linder GTE
Suzanne Yelen
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, DC 20006

David L. Lawson AT&T
Scott M. Bohannon
Sidley & Austin
1722 I Street, N.W.
Washington, DC 20006

Chris Frentrup
MCI Telecommunications Corporation
1801 Pennsylvania Avenue, N.W.
Washington, DC 20006

(CC9645ff.doc)
Last Update: 6/11/98